



myPass Application



Meet the team

01

Brokly Peshku

02

Hawraa Radhi

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Ali Cheaitou



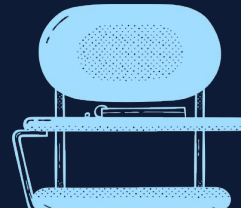
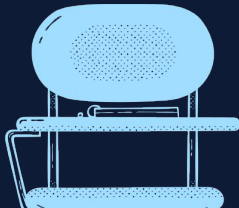
Introduction

The **MyPass** project ensures that users' sensitive data is encrypted and securely stored, providing peace of mind against unauthorized access. The application allows users to organize their data into categories, such as login credentials, credit card details, personal identities, and secure notes. It also includes features like secure sharing and access tracking to enhance accountability and security. Built with scalability in mind, the project utilizes a modular architecture, making it easy to extend functionality in the future. This user-centric approach ensures an intuitive experience while maintaining robust security measures.

Brukli Peshku part of the code

Key Responsibilities:

- **Design Pattern Implementation:**
 - Implemented Singleton pattern for secure and consistent session management across the application.
 - Utilized the Observer pattern to facilitate real-time notifications for security alerts.
- **User Interface Development:**
 - Developed and designed the front-end for the Login and Register pages, ensuring user-friendly navigation and responsive design.
- **Presentation and Documentation:**
 - Contributed to the final presentation layout and content preparation, focusing on clarity and detail.



Hawraa Radhi part of the code

Key Responsibilities:

- **Design Pattern Implementation:**
 - Applied the Builder pattern to construct complex password generation logic.
 - Implemented the Mediator pattern to manage complex logic interactions between UI components.
- **Form Development:**
 - Developed the 'Add Identity' form with advanced validation techniques to ensure data integrity.
- **Diagrams and Documentation:**
 - Led the creation of detailed class diagrams that map design patterns to application classes.

Visual Aids:

- Example of the 'Add Identity' form interface.
- Class diagram illustrating the Builder and Mediator patterns.



Ali Cheaitou part of the code

Key Responsibilities:

- **Design Pattern Implementation:**
 - Focused on the Chain of Responsibility pattern for implementing a secure master password recovery process.
- **Form Development:**
 - Developed the 'Add Secure Note' and 'Credit Card' forms, incorporating high security and encryption standards.
- **Final Presentation and Diagrams:**
 - Finalized the presentation slides and developed comprehensive database schema diagrams to illustrate the application's data flow.

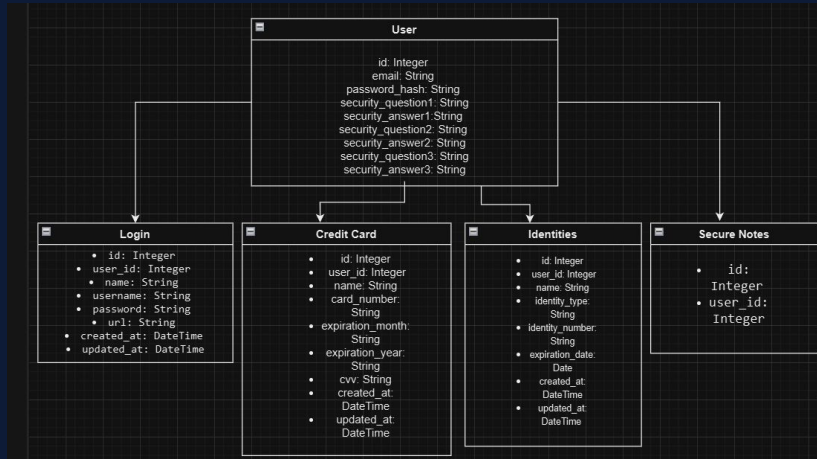
Visual Aids:

- Screenshots of the 'Add Secure Note' and 'Credit Card' forms.
- Database schema diagram showing the application's data structure.



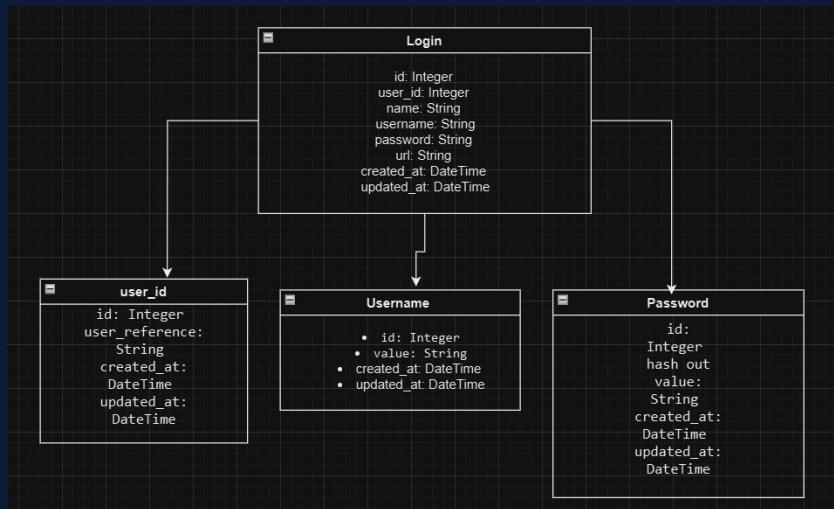
User Centric User Management System

This UML diagram represents a user-centric data management system designed to securely handle sensitive user information. At its core, the User class serves as the central entity, linking to other classes such as Login, Credit Card, Identities, and Secure Notes through one-to-many relationships. This implementation allows for efficient storage and management of diverse data types, including login credentials, payment information, personal identity records, and secure notes. By leveraging a relational database structure, the system ensures modular organization, enhanced security, and streamlined access to user-specific data.



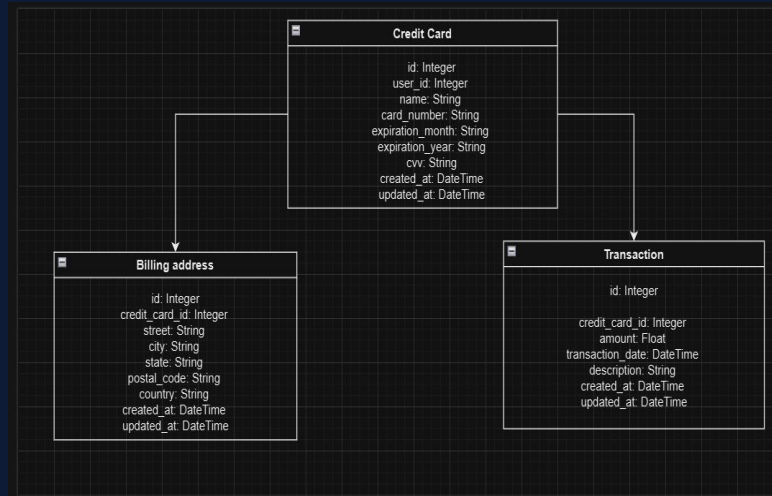
Login

This diagram illustrates a modular approach to managing login information by separating UserID, Username, and Password into distinct classes, each responsible for a specific aspect of user authentication. This design enhances security and scalability by allowing flexibility in managing and updating user credentials while maintaining clear relationships with the central Login class.



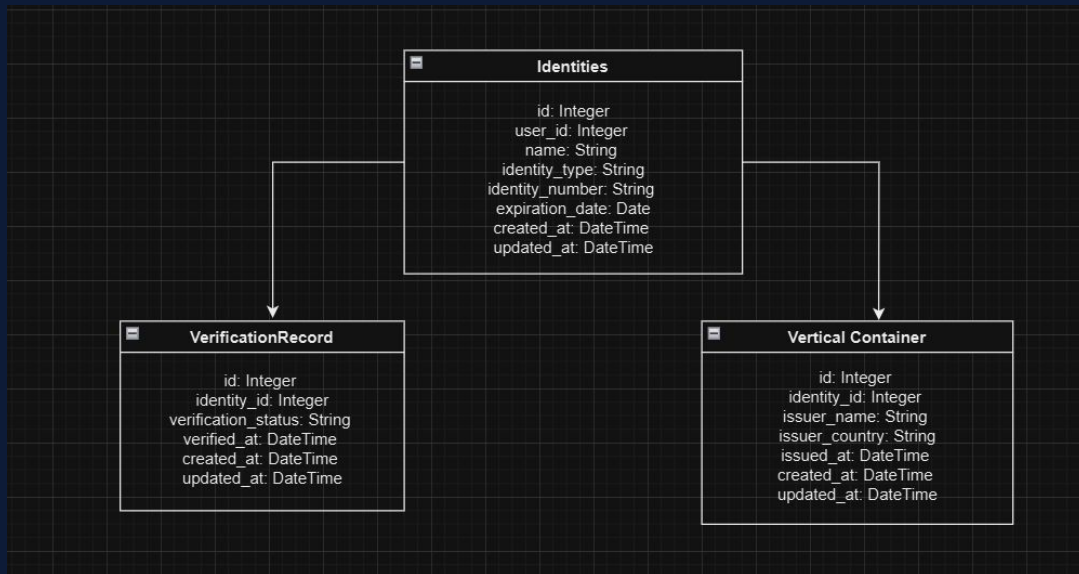
Credit Card

This diagram represents the **CreditCard** class and its relationships with two other classes: **BillingAddress** and **Transaction**. The **CreditCard** class stores user-specific payment details, while the **BillingAddress** class associates a unique billing address with each credit card. The **Transaction** class tracks purchase history, linking each transaction to a specific credit card for detailed financial management.



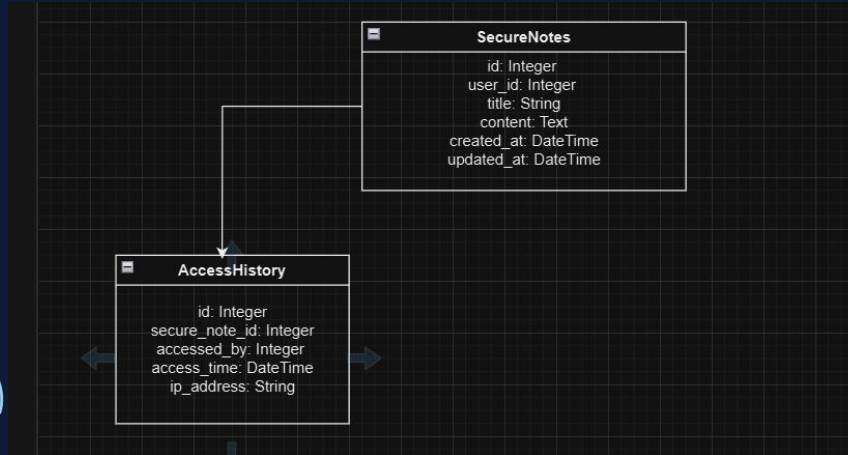
Identities

This diagram represents the **Identities** class and its relationships with **VerificationRecord** and **IssuerDetails**. The **Identities** class stores user identity details, while **VerificationRecord** tracks verification attempts, and **IssuerDetails** provides information about the issuing authority. Together, they enable comprehensive identity management.



SecureNotes

This diagram illustrates the **SecureNotes** class and its relationship with the **AccessHistory** class. The **SecureNotes** class represents secure, user-specific notes, while the **AccessHistory** class tracks when and by whom these notes were accessed. This structure enhances security and accountability by providing a clear audit trail for all access events.



User Interface

Session Expired

127.0.0.1:5000/login

Your session has expired. Please log in again.

Login to MyPass

Your session has expired. Please log in again.

Email

Password

Login

[Forgot Password?](#)

[Don't have an account? Register here](#)

Login Page

127.0.0.1:5000/login

Your session has expired. Please log in again.

Login to MyPass

Your session has expired. Please log in again.

Email

Password

Login

[Forgot Password?](#)

[Don't have an account? Register here](#)

Dashboard

127.0.0.1:5000/dashboard

Dashboard

amigos@yashoo.com Logout

Logins

Add Login

dcjnsncj

Username: Show Copy

Password: Show Copy

Edit Delete

evdsvdsl

Username: Show Copy

Password: Show Copy

Edit Delete

Credit Cards

Add Credit Card

dcsacasd

Card Number: 2323 Show Copy

CVV: ... Show Copy

Expiration: 02/2025

Edit Delete

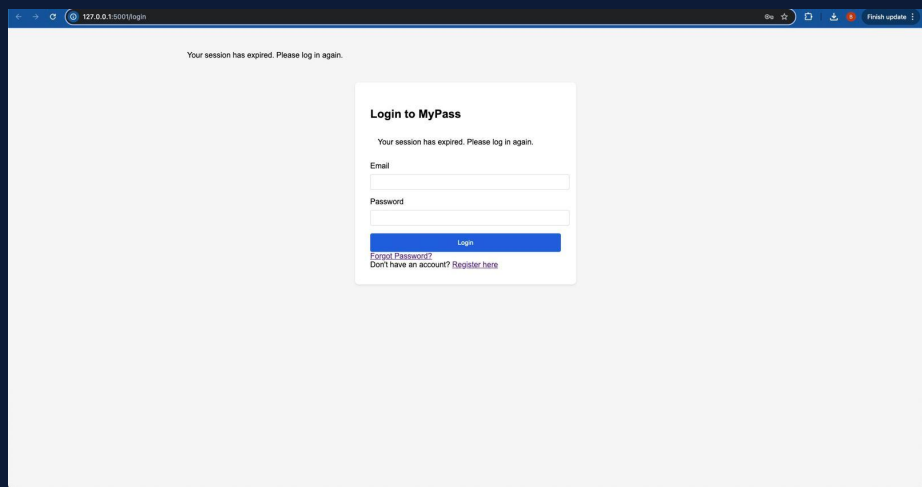
User Interface

Recover Password

This page displays a "Recover Password" form for a user. It includes fields to input an email address, answer three security questions, and set a new password along with its confirmation. At the bottom, there's a "Reset Password" button and a link to navigate back to the login page.

Registration Page

This page is a "Create Your Account" registration form. Users can enter their email, master password (with



Session Expired/Logout

This page shows the "Login to MyPass" interface with a session expiration notice at the top, prompting the user to log in again. It includes the same login fields, as well as links for password recovery and account registration.

Demo





References

Online Resources:

1. **Refactoring.Guru - Design Patterns**
 - <https://refactoring.guru/design-patterns>
 - Comprehensive resource on design patterns with examples and diagrams.
2. **OWASP: Open Web Application Security Project**
 - <https://www.owasp.org>
 - Leading resource on web application security, including password management.
3. **Mozilla Developer Network (MDN) - Web Security**
 - <https://developer.mozilla.org/en-US/docs/Web/Security>
 - Covers critical web security concepts like HTTPS, CSP, and secure coding.
4. **Google Developers: Web Fundamentals - Security**
 - <https://developers.google.com/web/fundamentals/security>
 - Practical advice for building secure web applications.
5. **UI Patterns**
 - <http://ui-patterns.com/>
 - Resource for designing intuitive and user-friendly interfaces.